DECLARATION AND POWER OF ATTORNEY FOR PATENT APPLICATION

As below named inventors, we hereby declare that: Our residence, post office address and citizenship are as stated below under our names.

We believe that we are the original, first and joint inventors (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled

CHOLINE BINDING PROTEINS FOR ANTI-PNEUMOCOCCAL VACCINES

me Specific	ation of which	
[]	is attached hereto	
[x]	was filed on <u>08/847,065</u>	
	as Application Serial No	May 1, 1997
	and was amended on	(if applicable)

We hereby state that we have reviewed and understand the contents of the above-identified Specification, including the claims, as amended by any amendment referred to above.

We acknowledge the duty to disclose information which is material to the examination of this application in accordance with Title 37, Code of Federal Regulations, 1.56(a).

We hereby claim foreign priority benefits under Title 35, United States Code, §119 of any provisional application filed in the United States in accordance with 35 U.S.C. §1.119(e), or any application for patent that has been converted to a Provisional Application within one (1) year of its filing date, or any foreign application(s) for patent or inventor's certificate listed below and have also identified below any foreign application for patent or inventor's certificate having a filing date before that of the application on which priority is claimed.

PRIOR FILED APPLICATION(S)			
<u>APPLICATION</u>	COUNTRY	(DAY/MONTH/YEAR FILED)	PRIORITY
<u>NUMBER</u>			CLAIMED
60/016,632	U.S.	1 MAY 1996	YES

We hereby claim the benefit under Title 35, United States Code, §120 of any United States application listed below, and, insofar as the subject matter of each of the claims of this application is not disclosed in any prior United States application in the manner provided by the first paragraph of Title 35, United States Code, §112, I acknowledge the duty to disclose material information as defined in Title 37, Code of Federal Regulations, §1.56(a), which occurred between the filing date of the prior application and the national or PCT international filing date of this application:

APPLICATION
NO.
NONE

FILING DATE (DAY/MONTH/YEAR)

STATUS - PATENTED, PENDING,

ABANDONED

I hereby appoint as my attorneys or agents the following persons: Jack Matalon (Attorney, Registration No. 22,441); Stefan J. Klauber (Attorney, Registration No. 22,604); David A. Jackson (Attorney, Registration No. 26,742); Barbara L. Renda (Attorney, Registration No. 27,626); Michael D. Davis (Attorney, Registration No. 39,161); and Joseph M. Homa (Attorney, Registration No. 40,023), said attorneys or agents with full power of substitution and revocation to prosecute this application and transact all business in the Patent and Trademark Office connected therewith.

Please address all correspondence regarding this application to:

DAVID A. JACKSON, ESQ. KLAUBER & JACKSON 411 HACKENSACK AVENUE HACKENSACK, NEW JERSEY 07601

Direct all telephone calls to David A. Jackson at (201) 487-5800.

We hereby declare that all statements made herein of our own knowledge are true and that all statements made on information and belief are believed to be true; and further, that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

FULL NAME OF FIRST INVENTOR:

H. ROBERT MASURE

RESIDENCE:

9600 Dove Meadow Cove W.

Germantown, TN 38139

COUNTRY OF CITIZENSHIP:

USA

POST OFFICE ADDRESS:

9600 Dove Meadow Cove W. Germantown, TN 38139

SIGNATURE OF INVENTOR _____

DATE ____

Docket No. 600-1-158 N

FULL NAME OF SECOND JOIN RESIDENCE:	NT INVENTOR: CARSTEN I. ROSENOW 500 E. 63rd Street, Apr. 19C 105 Liver way New York, NY 10021 feelwood City, LA 94065
COUNTRY OF CITIZENSHIP: POST OFFICE ADDRESS:	Germany 500 E. 63rd Street, Apt. 19C 105 Livorno Way New York, NY 10021 felwood City, CA94065
SIGNATURE OF INVENTOR	Mont Von
FULL NAME OF THIRD JOINT RESIDENCE: COUNTRY OF CITIZENSHIP: POST OFFICE ADDRESS:	
SIGNATURE OF INVENTOR	
DATE	
FULL NAME OF FOURTH JOIN RESIDENCE:	IT INVENTOR: THERESA M. WIZEMANN 12142 Brittania Circle Germantown, MD 20874
COUNTRY OF CITIZENSHIP: POST OFFICE ADDRESS:	
SIGNATURE OF INVENTOR	
DATE	

DECLARATION AND POWER OF ATTORNEY FOR PATENT APPLICATION

As below named inventors, we hereby declare that:

Our residence, post office address and citizenship are as stated below under our names.

We believe that we are the original, first and joint inventors (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled

CHOLINE BINDING PROTEINS FOR ANTI-PNEUMOCOCCAL VACCINES

the Specifica	ation of which	
	is attached hereto	
[x]	was filed on <u>08/847,065</u>	
	as Application Serial No. May 1, 199	07
	and was amended on	(if applicable).

We hereby state that we have reviewed and understand the contents of the above-identified Specification, including the claims, as amended by any amendment referred to above.

We acknowledge the duty to disclose information which is material to the examination of this application in accordance with Title 37, Code of Federal Regulations, 1.56(a).

We hereby claim foreign priority benefits under Title 35, United States Code, §119 of any provisional application filed in the United States in accordance with 35 U.S.C. §1.119(e), or any application for patent that has been converted to a Provisional Application within one (1) year of its filing date, or any foreign application(s) for patent or inventor's certificate listed below and have also identified below any foreign application for patent or inventor's certificate having a filing date before that of the application on which priority is claimed.

PRIOR FILED APPLICATION(S)			
<u>APPLICATION</u>	COUNTRY	(DAY/MONTH/YEAR FILED)	PRIORITY
<u>NUMBER</u>		·	CLAIMED
60/016,632	U.S.	1 MAY 1996	YES

We hereby claim the benefit under Title 35, United States Code, §120 of any United States application listed below, and, insofar as the subject matter of each of the claims of this application is not disclosed in any prior United States application in the manner provided by the first paragraph of Title 35, United States Code, §112, I acknowledge the duty to disclose material information as defined in Title 37, Code of Federal Regulations, §1.56(a), which occurred between the filing date of the prior application and the national or PCT international filing date of this application:

APPLICATION
NO.
NONE

FILING DATE (DAY/MONTH/YEAR)

STATUS - PATENTED, PENDING,

ABANDONED

I hereby appoint as my attorneys or agents the following persons: Jack Matalon (Attorney, Registration No. 22,441); Stefan J. Klauber (Attorney, Registration No. 22,604); David A. Jackson (Attorney, Registration No. 26,742); Barbara L. Renda (Attorney, Registration No. 27,626); Michael D. Davis (Attorney, Registration No. 39,161); and Joseph M. Homa (Attorney, Registration No. 40,023), said attorneys or agents with full power of substitution and revocation to prosecute this application and transact all business in the Patent and Trademark Office connected therewith.

Please address all correspondence regarding this application to:

DAVID A. JACKSON, ESQ. KLAUBER & JACKSON 411 HACKENSACK AVENUE HACKENSACK, NEW JERSEY 07601

Direct all telephone calls to David A. Jackson at (201) 487-5800.

We hereby declare that all statements made herein of our own knowledge are true and that all statements made on information and belief are believed to be true; and further, that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

FULL NAME OF FIRST INVENTOR:

H. ROBERT MASURE

RESIDENCE:

9600 Dove Meadow Cove W.

Germantown, TN 38139

COUNTRY OF CITIZENSHIP:

USA

POST OFFICE ADDRESS:

9600 Dove Meadow Cove W.

Germantown, TN 38139

SIGNATURE OF INVENTOR SALVAGEME

DATE 9/23/97

RESIDENCE:	1 INVENTOR: CARSTEN I. ROSENOW 105 Livorno Way	
	Redwood City, CA 94065	
COUNTRY OF CITIZENSHIP:	Germany	
POST OFFICE ADDRESS:	105 Livorno Way	
	Redwood City, CA 94065	
	100 wood City, C11 94003	
SIGNATURE OF INVENTOR		
DATE		
	NVENTOR: ELAINE TUOMANEN	
RESIDENCE:	9600 Dove Meadow Cove W.	
	Germantown, TN 38139	
COUNTRY OF CITIZENSHIP:	USA	
POST OFFICE ADDRESS:	9600 Dove Meadow Cove W.	
	Germantown, TN 38139	
	£01 - 1	
SIGNATURE OF INVENTOR	laen Turkare	
(2/20 /00-		
DATE Syd 22, 1997		
V /		
EIII I MANG OF FOURTH TORK		
	INVENTOR: THERESA M. WIZEMANN	
RESIDENCE:	12142 Brittania Circle	
	Germantown, MD 20874	
COUNTRY OF CITIZENSHIP:	TIGA	
POST OFFICE ADDRESS:	USA	
1031 OFFICE ADDRESS:	12142 Brittania Circle	
,	Germantown, MD 20874	
SIGNATURE OF INVENTOR	kue sali Wyen ann	
((
DATE 9/22/04	` •	

Inventor(s):

H. ROBERT MASURE, CARSTEN I. ROSENOW, ELAINE TUOMANEN,

AND THERESA M. WIZEMANN

For

CHOLINE BINDING PROTEINS FOR ANTI-PNEUMOCOCCAL

VACCINES

STATEMENT IN SUPPORT OF THE FILING/SUBMISSION OF A
NUCLEOTIDE/AMINO ACID SEQUENCE LISTING IN
ACCORDANCE WITH 37 CFR §§1.821 - 1.825

ASSISTANT COMMISSIONER OF PATENTS WASHINGTON, DC 20231

Dear Sir:

Han the true of true of true of the true of tr

DAVID A. JACKSON, attorney of record, hereby states as follows:

1. I hereby state that the content of the paper and computer readable copies of the Sequence Listing submitted in accordance with 37 CFR §1.821(c) and (e), respectively, are the same.

- 2. I hereby state that the submission, filed in accordance with 37 CFR §1.821(g) herein does not include new matter.
- 3. I hereby declare that all statements made herein of the undersigned's own knowledge are true and that all statements made on information and belief are believed to be true; and further, that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Title 18 of the U.S. Code, Section 1001 and that such willful false statements may jeopardize the validity of this Application or any patent issuing thereon.

DATED

11 /

DAVID A. JACKS

ASSIGNMENT

WHEREAS, we, the undersigned

H. ROBERT MASURE, a citizen of the United States, residing at 9600 Dove Meadow Cove W.

Germantown, TN 38139:

CARSTEN I. ROSENOW, a citizen of Germany, residing at 105 Livorno Way
Redwood City, CA 94065

ELAINE TUOMANEN, a citizen of the United States, residing at 9600 Dove Meadow Cove W.

Germantown, TN 38139; and

THERESA M. WIZEMANN, a citizen of the United States, residing at 12142 Brittania Circle
Germantown, MD 20874

ASSIGNORS, have invented certain new and useful improvements in

CHOLINE BINDING PROTEINS FOR ANTI-PNEUMOCOCCAL VACCINES

for which we have filed an Applications for Letters Patent in the United States on May 1, 1996 as U.S. Serial No. 60/016,632, and U.S. Serial No. 08/642,250; and

WHEREAS, THE ROCKEFELLER UNIVERSITY, an education corporation organized and existing under the laws of the State of New York, with offices at 1230 York Avenue, New York, New York 10021-6399;

ASSIGNEE, is desirous of obtaining the entire right, title and interest in, to and under the said improvements and the said application;

NOW, THEREFORE, FOR other good and valuable consideration, the receipt of which is hereby acknowledged, we the said

ASSIGNORS,

have sold, assigned, transferred and set over, and by these presents do hereby sell, assign, transfer and set over, to the said

ASSIGNEE,

its successors, legal representatives and assigns, the entire right, title and interest in, to and under the said improvements, and the said application and all divisions, renewals and continuations thereof, and all Letters Patent of the United States which may be granted thereon and all reissues and extensions thereof, and all applications for Letters Patent which may hereafter be filed for said improvements in any country or countries foreign to the United States, including the right to claim priority under the terms of any appropriate International Convention based upon said application for Letters Patent of the United States, and all Letters Patent which may be granted for said improvements in any country or countries foreign to the United States and extensions, renewals and reissues thereof; and we hereby authorize and request the Commissioner of Patents and Trademarks of the United States and any official of any country or countries foreign to the United States, whose duty it is to issue patents on applications as aforesaid, to issue all Letters Patent for said improvements to the said

ASSIGNEE,

its successors, legal representatives and assigns, in accordance with the terms of this instrument.

AND WE HEREBY covenant that we have full right to convey the interest herein assigned in the manner hereinabove set forth, and that we have not executed, and will not execute, any agreement in conflict herewith.

AND WE HEREBY further covenant and agree that we will communicate to the said

ASSIGNEE,

its successors, legal representatives and assigns, any fact known to us respecting said improvements, and testify in any legal proceeding, sign all lawful papers, execute all divisions, continuing and reissue applications, make all rightful oaths and generally do everything possible to aid the said

ASSIGNEE,

its successors, legal representatives and assigns, to obtain and enforce proper Patent Protection for said improvements in the United States.

IN TESTIMONY WHEREOF, we hereunto set our hand and seal the day and year set opposite our signatures.

Date, 19	H. ROBERT MASURE	L.S
Date 9-19-3., 1997	CARSTEN I. ROSENOW	L.S
Date, 19	ELAINE TUOMANEN	L.S
Date, 19	THERESA M. WIZEMAN	L.S

ASSIGNMENT

WHEREAS, we, the undersigned

H. ROBERT MASURE, a citizen of the United States,

residing at 9600 Dove Meadow Cove W. Germantown, TN 38139;

CARSTEN I. ROSENOW, a citizen of Germany,

residing at 105 Livorno Way

Redwood City, CA 94065

ELAINE TUOMANEN, a citizen of the United States,

residing at

9600 Dove Meadow Cove W.

Germantown, TN 38139; and

THERESA M. WIZEMANN, a citizen of the United States,

residing at

12142 Brittania Circle

Germantown, MD 20874

ASSIGNORS, have invented certain new and useful improvements in

CHOLINE BINDING PROTEINS FOR ANTI-PNEUMOCOCCAL VACCINES

for which we have filed an Applications for Letters Patent in the United States on May 1, 1996 as U.S. Serial No. 60/016,632, and U.S. Serial No. 08/642,250; and

WHEREAS, THE ROCKEFELLER UNIVERSITY, an education corporation organized and existing under the laws of the State of New York, with offices at 1230 York Avenue, New York, New York 10021-6399;

ASSIGNEE, is desirous of obtaining the entire right, title and interest in, to and under the said improvements and the said application;

NOW, THEREFORE, FOR other good and valuable consideration, the receipt of which is hereby acknowledged, we the said

ASSIGNORS.

have sold, assigned, transferred and set over, and by these presents do hereby sell, assign, transfer and set over, to the said

ASSIGNEE.

its successors, legal representatives and assigns, the entire right, title and interest in, to and under the said improvements, and the said application and all divisions, renewals and continuations thereof, and all Letters Patent of the United States which may be granted thereon and all reissues and extensions thereof, and all applications for Letters Patent which may hereafter be filed for said improvements in any country or countries foreign to the United States, including the right to claim priority under the terms of any appropriate International Convention based upon said application for Letters Patent of the United States, and all Letters Patent which may be granted for said improvements in any country or countries foreign to the United States and extensions, renewals and reissues thereof; and we hereby authorize and request the Commissioner of Patents and Trademarks of the United States and any official of any country or countries foreign to the United States, whose duty it is to issue patents on applications as aforesaid, to issue all Letters Patent for said improvements to the said

ASSIGNEE,

its successors, legal representatives and assigns, in accordance with the terms of this instrument.

AND WE HEREBY covenant that we have full right to convey the interest herein assigned in the manner hereinabove set forth, and that we have not executed, and will not execute, any agreement in conflict herewith.

AND WE HEREBY further covenant and agree that we will communicate to the said

ASSIGNEE.

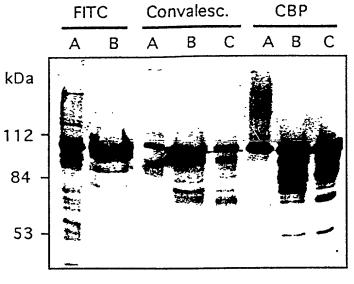
its successors, legal representatives and assigns, any fact known to us respecting said improvements, and testify in any legal proceeding, sign all lawful papers, execute all divisions, continuing and reissue applications, make all rightful oaths and generally do everything possible to aid the said

ASSIGNEE.

its successors, legal representatives and assigns, to obtain and enforce proper Patent Protection for said improvements in the United States.

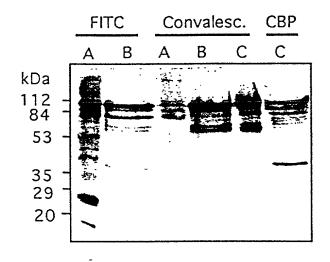
IN TESTIMONY WHEREOF, we hereunto set our hand and seal the day and year set opposite our signatures.

Date $\frac{9}{23}$, 19 97	H. ROBERT MASURE L.S.
Date, 19	L.S. CARSTEN I. ROSENOW
Date <u>Sept 22</u> , 1997	ELAINE TUOMANEN
Date 92397, 19	Theresa M. WIZEMAN



6% SDS-PAGE

FIG. 1



10% SDS-PAGE

FIG. 2